# DEPARTMENT OF LAND AND NATURAL RESOURCES

ENGINEERING DIVISION

JOB NO. F93C817E

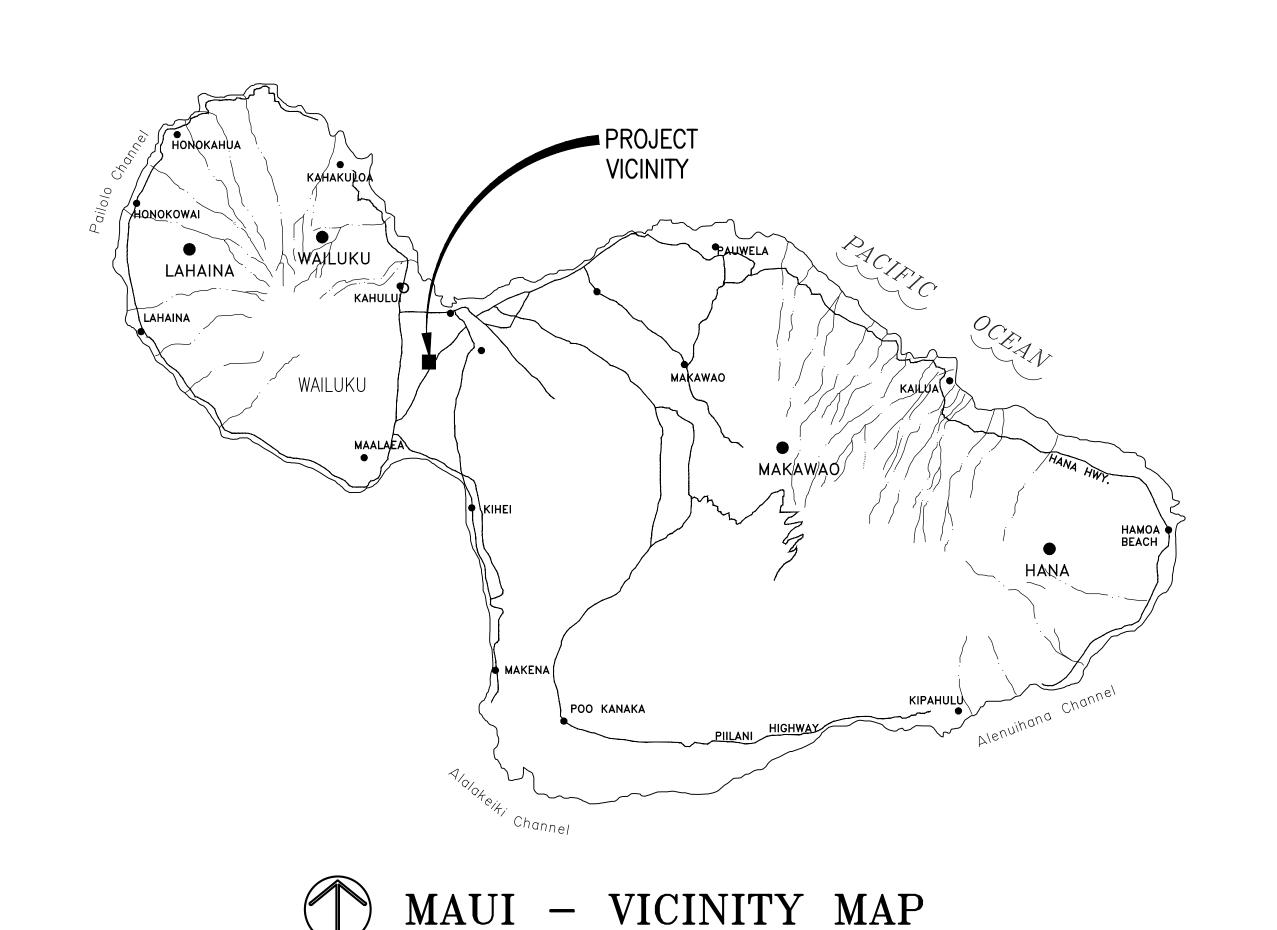
#### **ENERGY CODE CERTIFICATION**

MAUI COUNTY CODE, CHAPTER 16.16A ENERGY CODE TO THE BEST OF MY KNOWLEDGE, THIS PROJECTS DESIGN

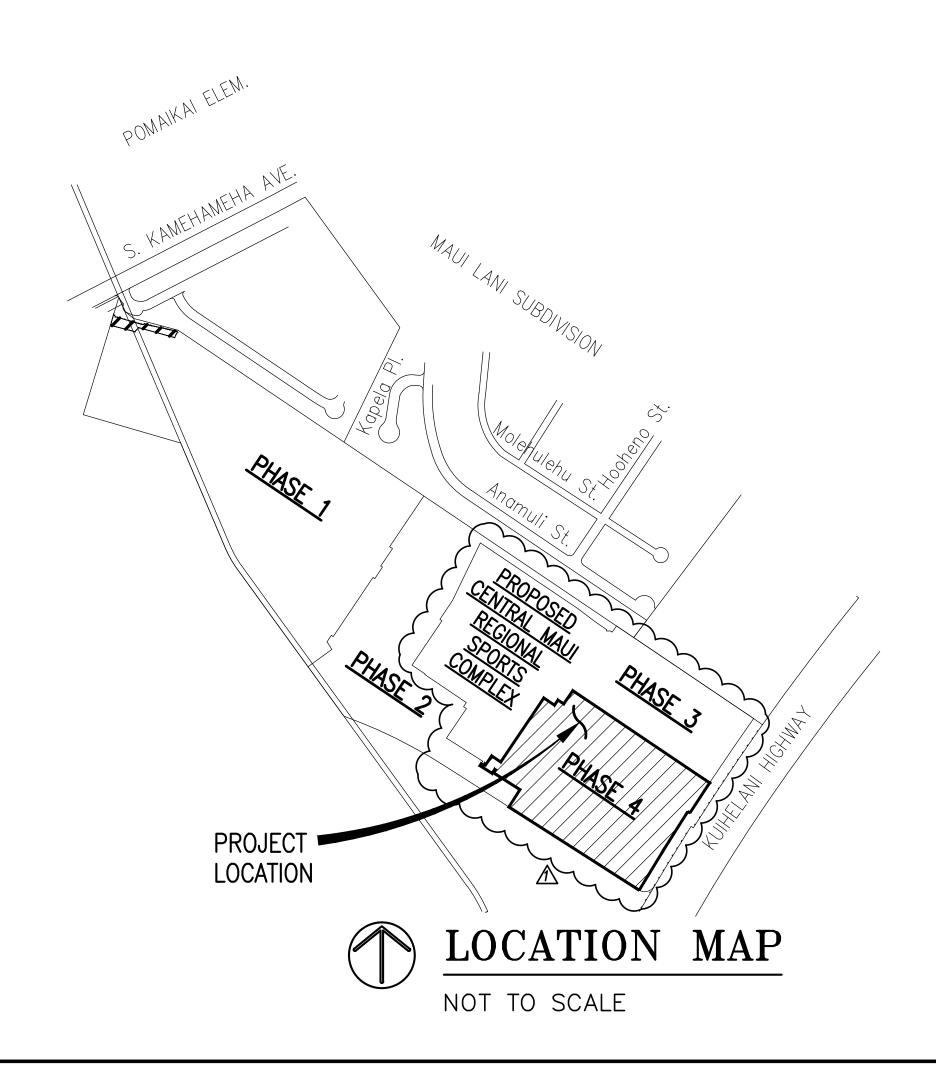
# CENTRAL MAUI REGIONAL SPORTS COMPLEX PHASE 4

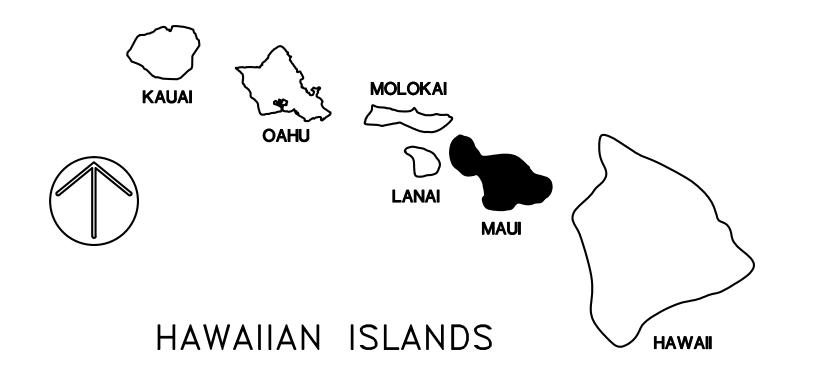
Wailuku, Maui, Hawaii

TMK (2) 3-8-007: 104



NOT TO SCALE





#### APPROVED

8/8/16 CARTY S. CHANG, CHIEF ENGINEER ENGINEERING DIVISION
DEPARTMENT OF LAND AND NATURAL RESOURCES 85,16

CURT A. COTTRELL, ADMINISTRATOR DIVISION OF STATE PARKS DEPARTMENT OF LAND AND NATURAL RESOURCES

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C-54 C-55

Miscellaneous Details

#### General Construction Notes

- All construction work shall conform to the standard details for Public Works Construction, Sept. 1984 and the Standard Specifications for Public Works Construction, Sept. 1986, as amended, County of Maui.
- Contractor shall secure the services of a Hawaii licensed surveyor to provide construction stakeout.
- 3. The contractor shall notify Maui Electric Company for any work touching their facilities at least seven (7) days prior to such work. The contractor shall coordinate with and notify all affected property owners.
- 4. The aerial survey shown within the construction documents were prepared by the R.M. Towill Corporation on December 18, 2012. Topographic conditions/features/elevations shown on the aerial survey were based on photographs taken at 3,000 feet above the ground surface and limited ground survey. The aerial survey shown was prepared to National Mapping Standards. The Contractor shall base bids on the above information. No additional compensation will be allowed for grade discrepancies that fall within the National Mapping Standards tolerances.
- 5. The Contractor is responsible for obtaining right—of—entry from property owners/lessees as needed.. The contractor shall add property owners/lessees on the liability insurance as additional insured. If the right—of—entry is not processed by the State, the contractor shall procure all right—of—entry at no costs to the State.
- Standard detail drawings and standard specifications of the Department of Public Works shall be included as part of the construction plans.
- 7. All construction work shall strictly conform to the latest version of the Hawaii Standard Specifications for Road and Bridge Public Works Construction, and the September 1984 "Standard Details" for Public Works Construction of the Department of Public Works, as amended.
- 8. If existing utilities, whether or not shown on plans, are damaged during construction, the contractor shall at his own expense be required to repair such utilities.
- 9. Contractor shall provide, install and maintain all necessary signs, lights, flares, barricades, and other protection devices for the protection, safety, and convenience of the public, according to the latest version of the "Manual on Uniform Traffic Control Device for Streets and Highways", and to the rules and regulations governing the use of traffic control devices at worksites and/or adjacent to public streets and highways adopted by the Highway Safety Coordinator and the U.S. Federal Highway Administration "Manual on Uniform Traffic Control Devices for Highway Construction and Maintenance Operations".
- 10. The contractor shall, at his own expense, keep the project area and surrounding are free from dust nuisance. The work shall be in conformance with Air Pollution Control Standards and Regulations of the State Department of Health and County Grading Ordinance.
- 11. The contractor shall remove all silt and debris resulting from his work and deposited in drainage facilities, roadways, and other areas. The cost incurred for any necessary remedial action ordered by the State shall be paid by the contractor.

## General Construction Notes (Cont'd)

- 12. Construction debris and wastes shall be deposited at an appropriate work site. The contractor shall inform the State of the location of the disposal sites. The disposal site must fulfill the requirements of the grading ordinance.
- 13. If the clearance between a wastewater line and a new or existing waterline is eighteen inches (18") or less, the wastewater line shall be concrete—jacketed in accordance with the Standard Details of Public Works Construction dated September 1984, as amended.
- 14. Should historic sites such as walls, platforms, pavements, or mounds, or remains such as artifacts burials, concentration of shell or charcoal be encountered during construction activities, work shall cease immediately in the immediate vicinity of the find and the find shall be protected from further damage. The contractor and/or landowner shall immediately contact the State Historic Preservation Division (692–8015), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary.
- 15. Wheelchair ramp inspection/certification forms shall be required for all newly constructed ramps.
- 16. Compaction Requirements
  - a. Testing of materials shall be conducted by an approved independent testing agency in accordance with ASTM standard methods or as specified by the Department of Public Works, Engineering Division, as follows:
  - Embankment/Select Borrow and Subgrade Materials: one (1) compaction test per 600 square yards per lift;
  - ii. Aggregate Subbase Course: one (1) compaction test per 400 square yards; one (1) gradation and sand equivalent test per lift per project;
  - iii. Aggregate Base Course: one (1)
    compaction test per 300 square yards;
    one (1) gradation and sand equivalent
    test per lift per project;
  - v. Asphalt Concrete Pavement or Asphalt Treated Base Course: three (3) A.C. cores for thickness and density tests per project;
  - v. Trench Backfill Material: one (1) test for each 300 lineal feet of trench per lift of material.
  - contractor shall submit all testing reports including results to the County's inspection agency for review and approval prior to County's acceptance of work.
  - c. The contractor shall be required to notify the State and County of any testing failures and correct each failure prior to proceeding to the next phase of construction

#### **Grading Notes**

- 1. (All grading work shall conform to Title 20 of the Maui County Code and Soils Report by Geolabs, Inc. (entitled "Geotechnical Engineering Exploration Central Maui Regional Park" dated October 1, 2013.
- Central Maui Regional Park" dated October 1, 2013.

  Grading shall not commence until a grading permit is approved.
- is approved.

  2. The contractor shall obtain a grading permit from the Department of Public Works and Environmental Management at least two (2) weeks before any work begins.
- 3. All grading operations shall be performed in conformance with the applicable provisions of the Water Pollution Control and Water Quality Standards contained in the Public Health Regulations, State Department of Health, on water pollution control and water quality standards and the county grading ordinance.
- 4. No contractor shall perform any grading operation so as to cause soil or debris in any form to fall or flow onto adjoining properties, streets or natural watercourse. should such violations occur, the costs incurred for any remedial action by the director of Public Works and Environmental Management shall be payable by the contractor.
- 5. All slopes and exposed areas shall be sodded or planted immediately after the grading work has been completed. Contractor shall grass and maintain all exposed areas that are subject to erosion.
- 6. Fills on slopes steeper than 5:1 shall continuously be keyed and benched.
- 7. Construction debris and wastes shall be deposited at an appropriate site. The contractor shall inform the engineer of the location of disposal sites. The disposal site must also fulfill the requirements of the grading ordinances.
- 8. The contractor shall provide dust control measures at all times, weekends and holidays included. All graded areas shall be stabilized to minimize dust after construction activity has ceased for the day and for the weekend.
- 9. All exposed slopes shall be protected with temporary diversions, berms, and swales at the top of the slopes.
- 10. Existing topographic information shown were compiled from survey conducted by R.M. Towill Corporation on December 12, 2012. The contractor shall examine the site and take whatever measures necessary to verify conditions existing in the field with no added cost to the State.
- 11. The County shall be informed of the location of disposal sites for excess material when the grading permit application is filed. The disposal site must also fulfill the requirements of the grading ordinance.
- The limits of the grading area shall be flagged before any grading work begins.
- 13. Unsuitable materials, such as organic soils, clays, and debris, shall be removed and disposed of appropriately. Any disposal made on—site shall be approved by the contractor.
- 14. Life of the stockpile shall be 12 months. Earthwork:

Distance from top of cut or

bottom of the to pro	operty line:			
Height of Cut o	r Fill Distance	from	Property	Line
0' to 2'	1'			
more than 2' to		,		
more than 4' to		,		
more than 6' to		,		
more than 10' t	to 15' 5	,		
more than 15'	8	,		

#### Sewer Notes

- All wastewater lines and appurtenances shall conform to the Standard Details for Public Works Construction, dated September 1984, of the Department of Public Works, County of Maui.
- Before construction commences, the contractor shall schedule and document a pre-construction meeting with all agencies having utilities affected by the work.
- County of Maui has the right to stop construction, should any work be found contrary to the approved plans and specifications, or detrimental to the public interest.
- 4. All existing wastewater lines, whether or not shown on the plans, if damaged during construction, shall be repaired by the contractor and the contractor shall pay all expenses.
- 5. The contractor shall notify the County of Maui one (1) week prior to connection to any existing wastewater lines.
- 6. Should the contractor excavate beyond the trench pay—width, as specified in the Standard Details for Public Works Construction, dated September 1984, and such actions result in a greater load to the pipe, the contractor shall provide, at the contractor's expense, a higher class of bedding material that will withstand the added load.
- 7. Wastewater laterals shall be six (6) inches in diameter at a minimum of 2% slope per plumbing code, unless approved otherwise.
- 8. Redwood marker or pvc pipe shall be installed at each new wastewater lateral.
- 9. Where the clearance between a wastewater line and a new or existing utility line is eighteen (18) inches or less, the wastewater line shall be concrete jacketed in accordance with the Standard Details of Public Works Construction, dated September 1984.
- 10. Prior to final acceptance, all wastewater lines installed shall:
  - A. Be flushed with water and any accumulated construction debris and other foreign materials shall be removed.
  - B. Meet the hyrdostatic pressure test and the loading test as specified in section 18 of the "Standard Specifications for Public Works Construction," dated September 1986.
- 11. A set of "as—built" drawings shall be submitted to the County of Maui by the contractor as a condition prior to acceptance of the project.
- 12. Crushed rock cradle is permitted where the soil is stable. In areas of unstable soil, the maker of the plans and the construction (soils) engineer will determine the pipe support required.
- 13. The underground pipes, cables or ductlines known to exist by the engineer from his research of records are indicated on the plans. The contractor shall verify the location and depth of the facilities including and affecting sewer lines, and exercise proper care in excavating the area. The contractor shall be responsible and shall pay for all damaged utilities.
- 14. Building plumbing facilities shall be controlled by sewer lateral inverts.
- 15. The contractor shall be responsible for maintaining continuous sewer service to all affected areas during construction.

## Sewer Notes (Cont'd)

- 16. The contractor shall be responsible for any sewage spills caused during construction. The contractor shall notify the state Department of Health and utilize appropriate sampling and analyzing procedures. The contractor shall be responsible for all public notifications and press releases.
- 17. The contractor shall install "rainstopper" manhole inserts in all sewer manholes with type "SA" frame and cover.
- 18. All sewer pipe joints within easements shall be wrapped with geotextile root barrier.
- 19. When connecting to a live sewer line, the contractor shall abide by all conditions that the Department of Health sets forth to mitigate any wastewater spill that may occur.

